

REMARKS

Claim Rejections:

Claims 1, 2, 4, 6, 7, 9 and 10 are all of the claims pending in the present application and currently all of the claims stand rejected.

35 U.S.C. § 103(a) Rejection - Claims 1, 2, 4, 6, 7, 9 and 10:

Claims 1, 2, 4, 6, 7, 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Koch in view of Weisenburger (both references previously applied). In view of the following discussion, Applicant respectfully disagrees.

First, Applicant notes that the Examiner has indicated that the claims do not positively recite that the piercing portions penetrate through a coating and a conductor. Specifically, the Examiner focuses on the fact that the claims require only that the piercing portions be “adapted” to pierce the coating and the conductor. Applicant notes that claims 1, 4 and 6 have been amended as shown in the attached Appendix to positively recite this feature of the present invention. Therefore, Applicant submits that this limitation can no longer be ignored and, as such, the above cited references fail to teach or suggest each and every feature of the claimed invention.

However, additionally and independently, Applicant notes that the Examiner disagrees with the arguments as to why one of ordinary skill in the art would not have combined the cited references. The Examiner states that one of ordinary skill in the art would have found it obvious to facilitate easy penetration of coating and conductor by adding an additional taper surface to the portions 13 in Koch. *See* Koch, Figures 4 and 5, and the Office Action, pages 2-3. The Examiner also disagrees with the assertion that the operation of the portions 13 in Koch would be

adversely affected by the addition of an internal taper surface. *See* Office Action, page 3. The Examiner states that the shape of the “caulking device” would affect the contact of the portions 13 with the arm 11, and that it can not be assumed that the portions 13 would not make full contact with the arm 11. *See id.*

Applicant respectfully disagrees with the Examiner’s assertions on this point. Specifically, Applicant notes that the portions 13 in Koch are only pressed through a foil F and not the arm 11, or any other metal or rigid surface. As such, Applicant submits that one of ordinary skill in the art would not feel the need to add an additional tapered surface to the portions 13. Applicant submits that such a modification to Koch, would add cost and complexity to the terminal when there is no need because of the relatively little force needed to press through a foil F. Applicant notes that the pressure needed to press a contact through foil is less than that needed to press a contact through both foil and a contact surface (i.e. the arm 11). Because of this, there is no motivation within either of the references of adding an additional taper surface to the portions 13, in Koch.

Moreover, Applicant incorporates herein the arguments and discussions set forth regarding the above combination submitted in Applicant’s Amendment dated April 23, 2003. Specifically, Applicant notes the discussion on pages 4-5 regarding the added tapered surface. Applicant notes that the Examiner attempts to rebut this argument by stating that shape of the “caulking device” would affect the contact between the arm 11 and the portions 13. However, Applicant submits that even if it were assumed that this statement is true, it cuts against the Examiner’s assertions. The fact that one of ordinary skill in the art would have to use a caulking

device adapted for the new configuration (i.e. with the interior tapered surfaces), weighs against the person of skill in the art of doing so. Because there is no need and/or teaching to add an additional tapered surface, one of ordinary skill in the art would not wish to obtain a special caulking device, when there is no need to do so.

Finally, Applicant notes that one of ordinary skill in the art would not use the teachings of Weisenburger, with Koch, because Weisenburger has little relevance to the contact portions 13 in Koch. Stated differently, as shown in Weisenburger, the tab-form lances 15 are configured such that none of the lances 15 are bent towards each other (as in Koch and the present invention). Because of this, Weisenburger provides not teaching or suggestion of having additional tapered surfaces on the Koch portions 13.

In view of the foregoing, Applicant submits that the combination of the above cited references, fails to teach or suggest each and every feature of the claimed invention, and would not be combined as asserted by the Examiner.

Therefore, Applicant submits that the Examiner has failed to establish a *prima facie* case of obviousness and hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 103(a) rejection of the above claims.

Conclusion:

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No.: 09/910,872

Our Ref.: Q65548
Art Unit: 2833

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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23373

CUSTOMER NUMBER

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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

Claim 1 (Twice Amended). An electric connecting terminal ~~to be~~ connected to a flat circuit body comprising:

a plane portion;

a pair of piercing portions erected from opposite side edges of the plane portion ~~adapted to which~~ penetrate through a coating and a conductor of the flat circuit body and ~~fold~~ tips thereof are folded in such a direction as to approach each other, wherein said piercing portions include a root portion and a distal portion, an internal surface of said distal portion being inclined with respect to an internal surface of said root portion so that said distal portion is tapered.

Claim 4 (Three Times Amended). An electric connecting terminal ~~to be~~ connected to a flat circuit body comprising:

a plane portion; and

a pair of piercing portions erected from opposite side edges of the plane portion ~~and adapted to which~~ penetrate through a coating and a conductor of the flat circuit body and ~~fold~~ tips thereof are folded in such a direction as to approach each other, said side edges extending in a longitudinal direction of said terminal

wherein each piercing portion includes a portion which has an approximately constant width in said longitudinal direction, is located adjacent to the plane portion and penetrates through the conductor.

Claim 6 (Twice Amended). An electric connecting terminal ~~to be~~ connected to a flat circuit body comprising:

a plane portion; and

a pair of piercing portions erected from opposite side edges of the plane portion which penetrate through a coating and a conductor of the flat circuit body and are adapted to be folded in such a direction as to approach each other, said edges extending in a longitudinal direction of said terminal each of the piercing portions including:

a first portion, one end of the first portion being connected to the edge of the plane portion, and

a second portion connected to the other end of the first portion including a tip and a taper surface for gradually reducing a thickness of the second portion,

wherein the pair of the taper surfaces face each other over the plane portion, wherein the first portion has an approximately constant width in said longitudinal direction.